FIG. 1

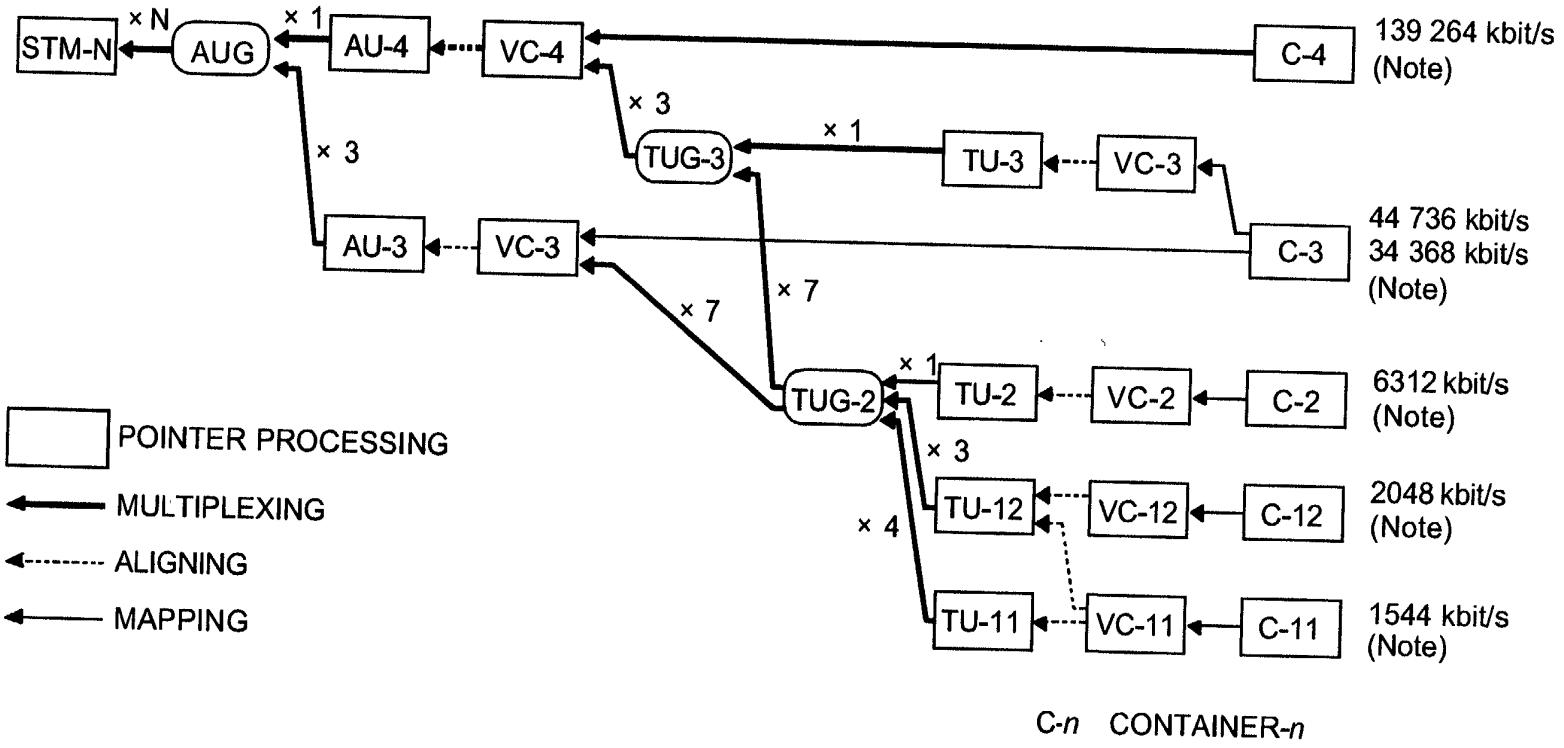

STM-N
× N
AUG
× 1
AU-4
VC-4
C-4
139 264 kbit/s
(Note)
× 3
TUG-3
× 1
TU-3
VC-3
× 3
AU-3
VC-3
C-3
44 736 kbit/s
34 368 kbit/s
(Note)
× 7
× 7
× 1
TUG-2
TU-2
VC-2
C-2
6312 kbit/s
(Note)
× 3
TU-12
VC-12
C-12
2048 kbit/s
(Note)
× 4
TU-11
VC-11
C-11
1544 kbit/s
(Note)
POINTER PROCESSING
MULTIPLEXING
ALIGNING
MAPPING
C-n CONTAINER-n

FIG. 2

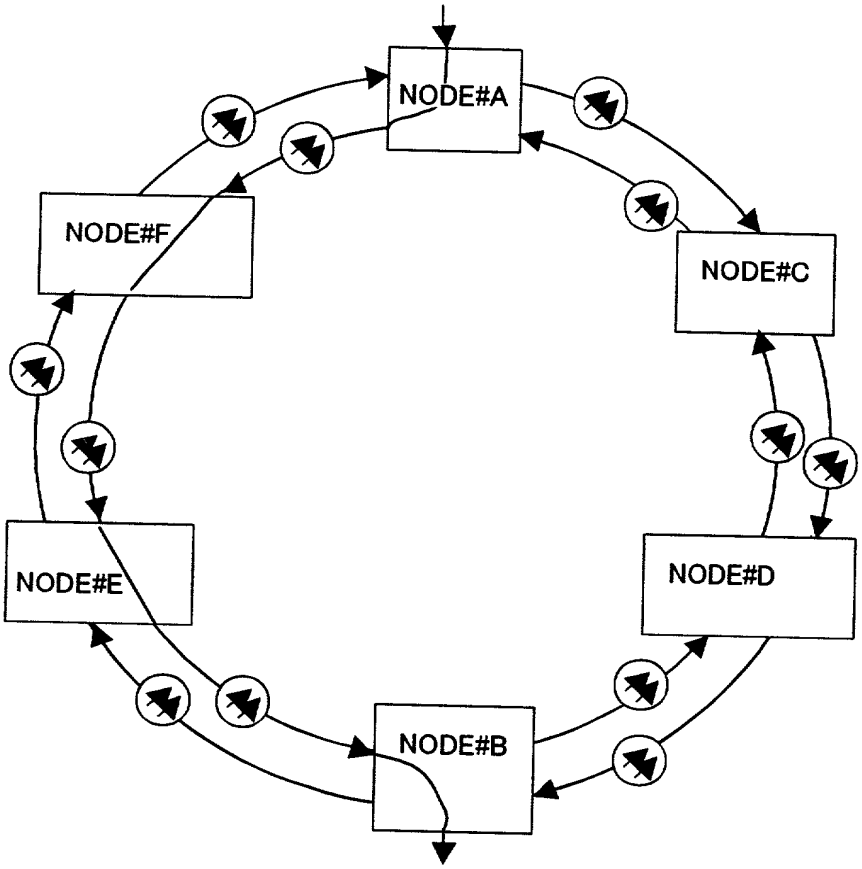


FIG. 3

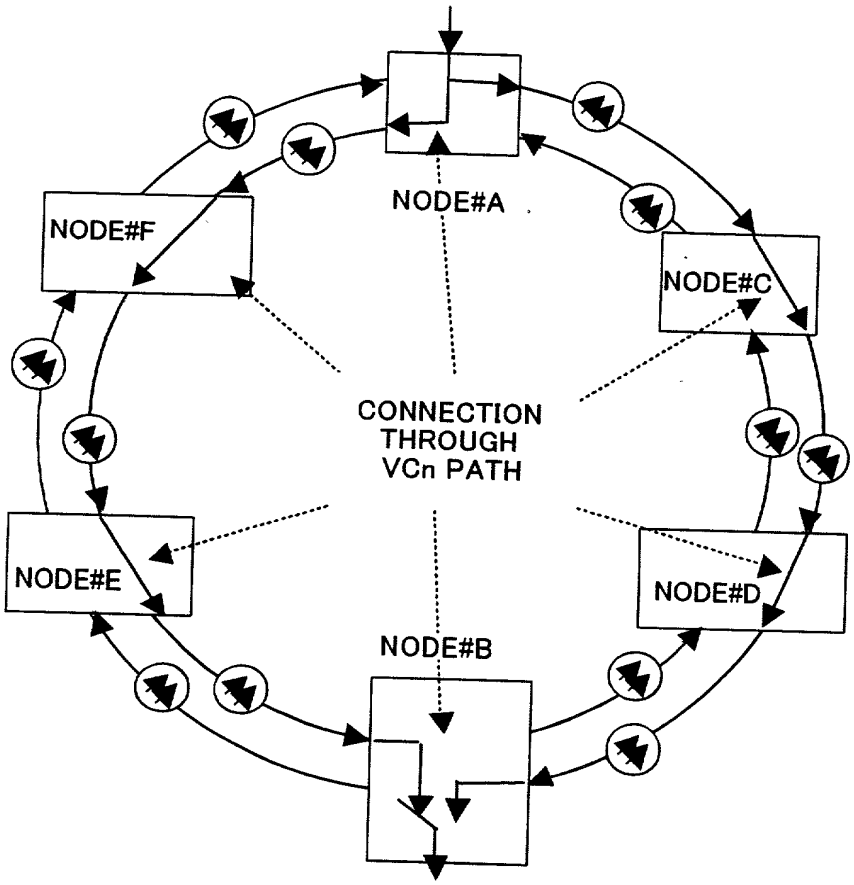

NODE#A
NODE#F
NODE#C
CONNECTION
THROUGH
VCn PATH
NODE#E
NODE#D
NODE#B

FIG. 4

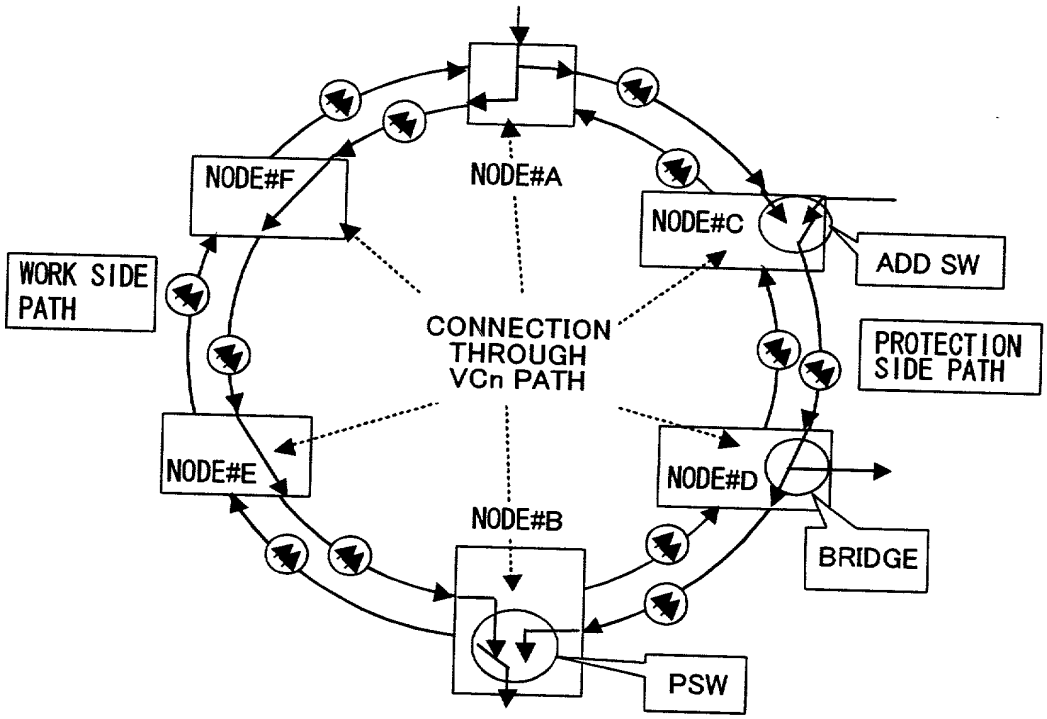

NODE#A
NODE#F
NODE#C
ADD SW
WORK SIDE PATH
CONNECTION THROUGH VCn PATH
PROTECTION SIDE PATH
NODE#E
NODE#D
NODE#B
BRIDGE
PSW

FIG. 5

SIGNAL CONDITION (SC)				DEFINITION
1	2	3	4	
0	0	0	0	
0	0	0	1	HP
0	0	1	0	LP
0	0	1	1	
0	1	0	0	PCA
0	1	0	1	
0	1	1	0	
0	1	1	1	
1	0	0	0	
1	0	0	1	
1	0	1	0	
1	0	1	1	
1	1	0	0	
1	1	0	1	
1	1	1	0	
1	1	1	1	DNU

FIG. 6

SWITCH CONDITION (SWC)				DEFINITION
1	2	3	4	
0	0	0	0	
0	0	0	1	NR
0	0	1	0	SR
0	0	1	1	BK
0	1	0	0	
0	1	0	1	
0	1	1	0	
0	1	1	1	
1	0	0	0	
1	0	0	1	
1	0	1	0	
1	0	1	1	
1	1	0	0	
1	1	0	1	
1	1	1	0	
1	1	1	1	DNU

FIG. 7

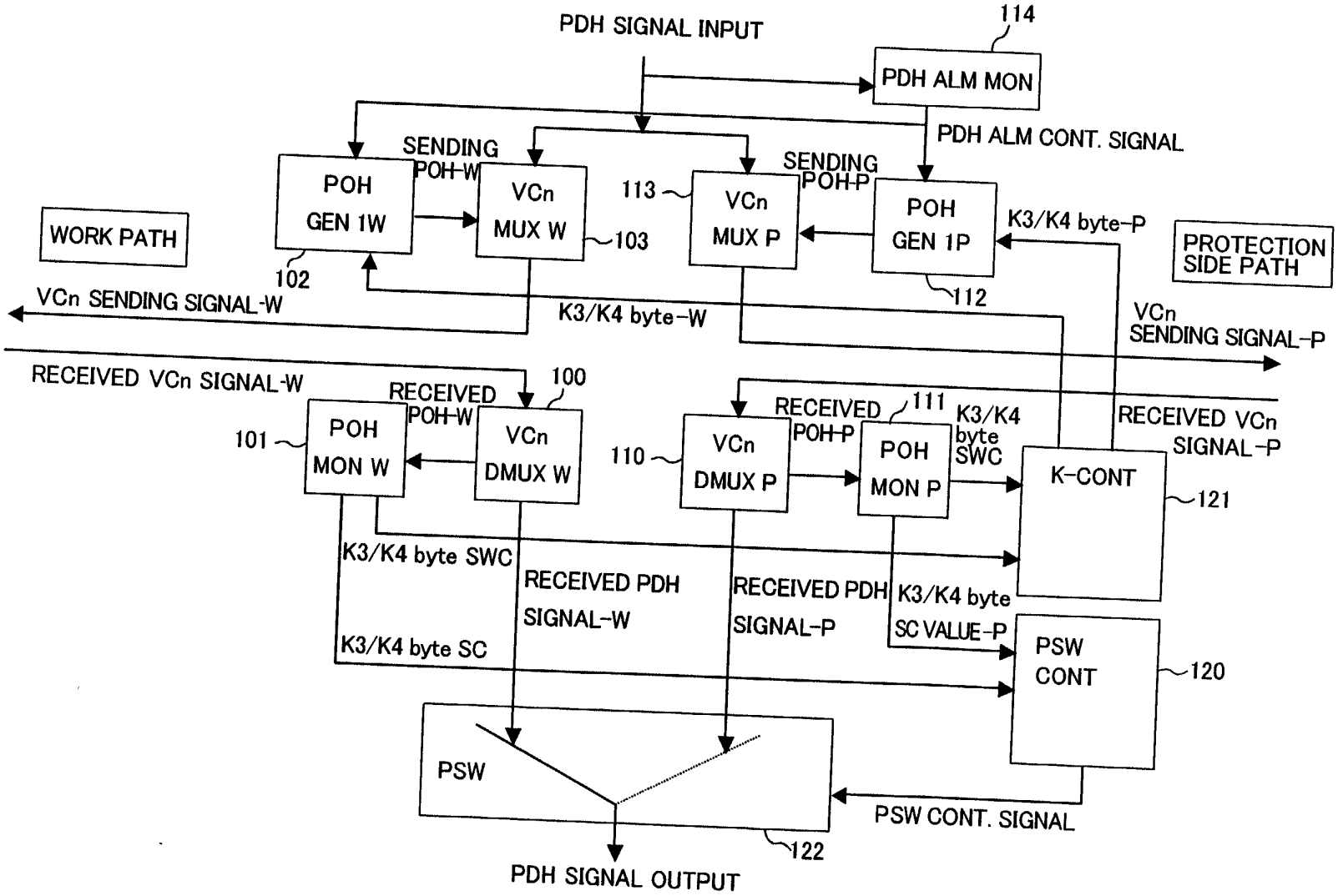

PDH SIGNAL INPUT
114
PDH ALM MON
PDH ALM CONT. SIGNAL
SENDING POH-W
SENDING POH-P
POH GEN 1W
VCn MUX W
103
113
VCn MUX P
POH GEN 1P
K3/K4 byte-P
WORK PATH
PROTECTION SIDE PATH
102
112
VCn SENDING SIGNAL-W
K3/K4 byte-W
VCn SENDING SIGNAL-P
RECEIVED VCn SIGNAL-W
RECEIVED POH-W
100
RECEIVED POH-P
111
K3/K4 byte SWC
RECEIVED VCn SIGNAL-P
101
POH MON W
VCn DMUX W
110
VCn DMUX P
POH MON P
K-CONT
121
K3/K4 byte SWC
RECEIVED PDH SIGNAL-W
RECEIVED PDH SIGNAL-P
K3/K4 byte SC VALUE-P
K3/K4 byte SC
PSW CONT
120
PSW
PSW CONT. SIGNAL
122
PDH SIGNAL OUTPUT

FIG. 8

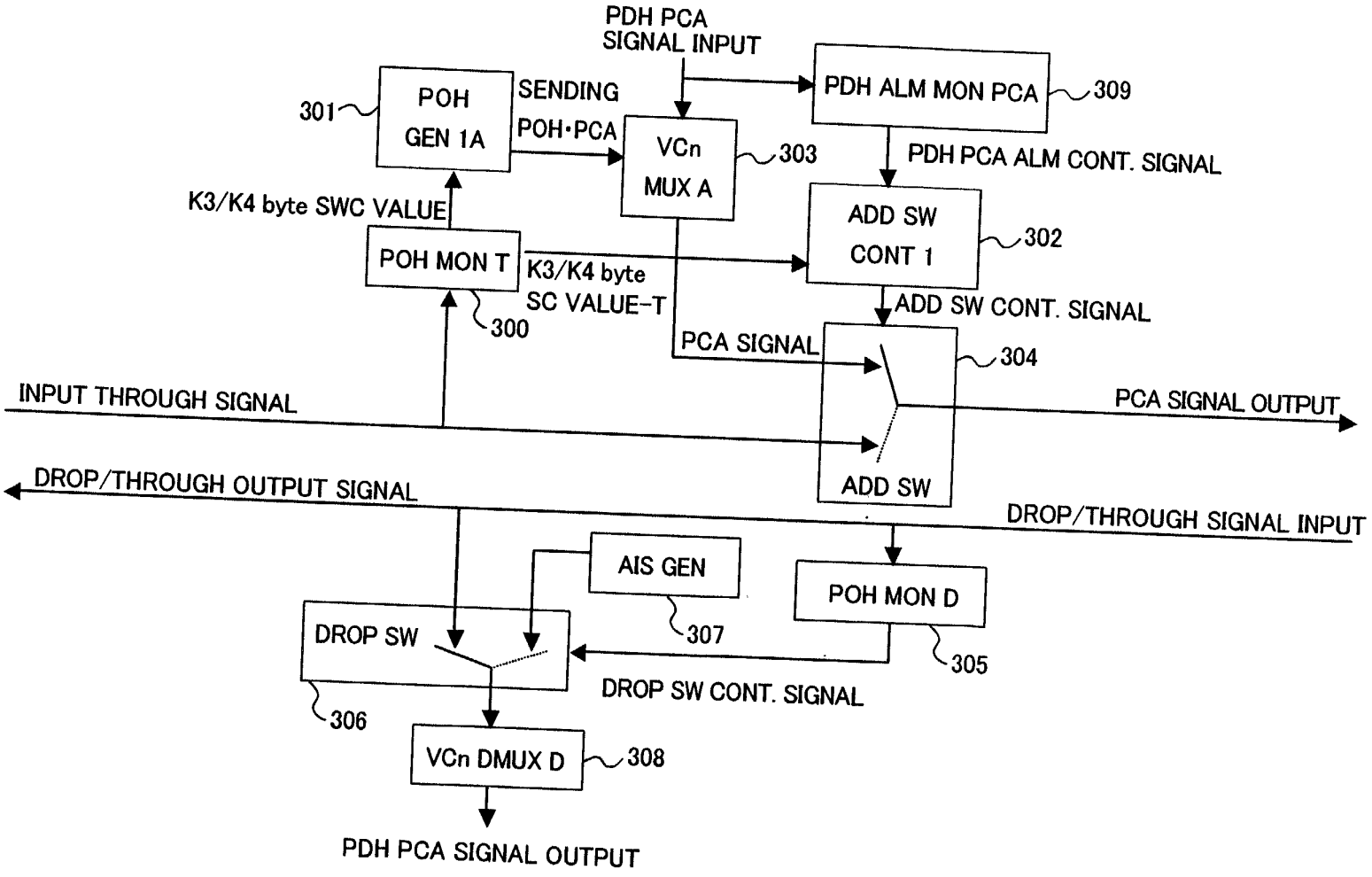

PDH PCA
SIGNAL INPUT
PDH ALM MON PCA
309
301
POH
GEN 1A
SENDING
POH·PCA
VCn
MUX A
303
PDH PCA ALM CONT. SIGNAL
K3/K4 byte SWC VALUE
ADD SW
CONT 1
302
POH MON T
K3/K4 byte
SC VALUE-T
300
ADD SW CONT. SIGNAL
PCA SIGNAL
304
INPUT THROUGH SIGNAL
PCA SIGNAL OUTPUT
DROP/THROUGH OUTPUT SIGNAL
ADD SW
DROP/THROUGH SIGNAL INPUT
AIS GEN
307
POH MON D
305
DROP SW
DROP SW CONT. SIGNAL
306
VCn DMUX D
308
PDH PCA SIGNAL OUTPUT

FIG. 9

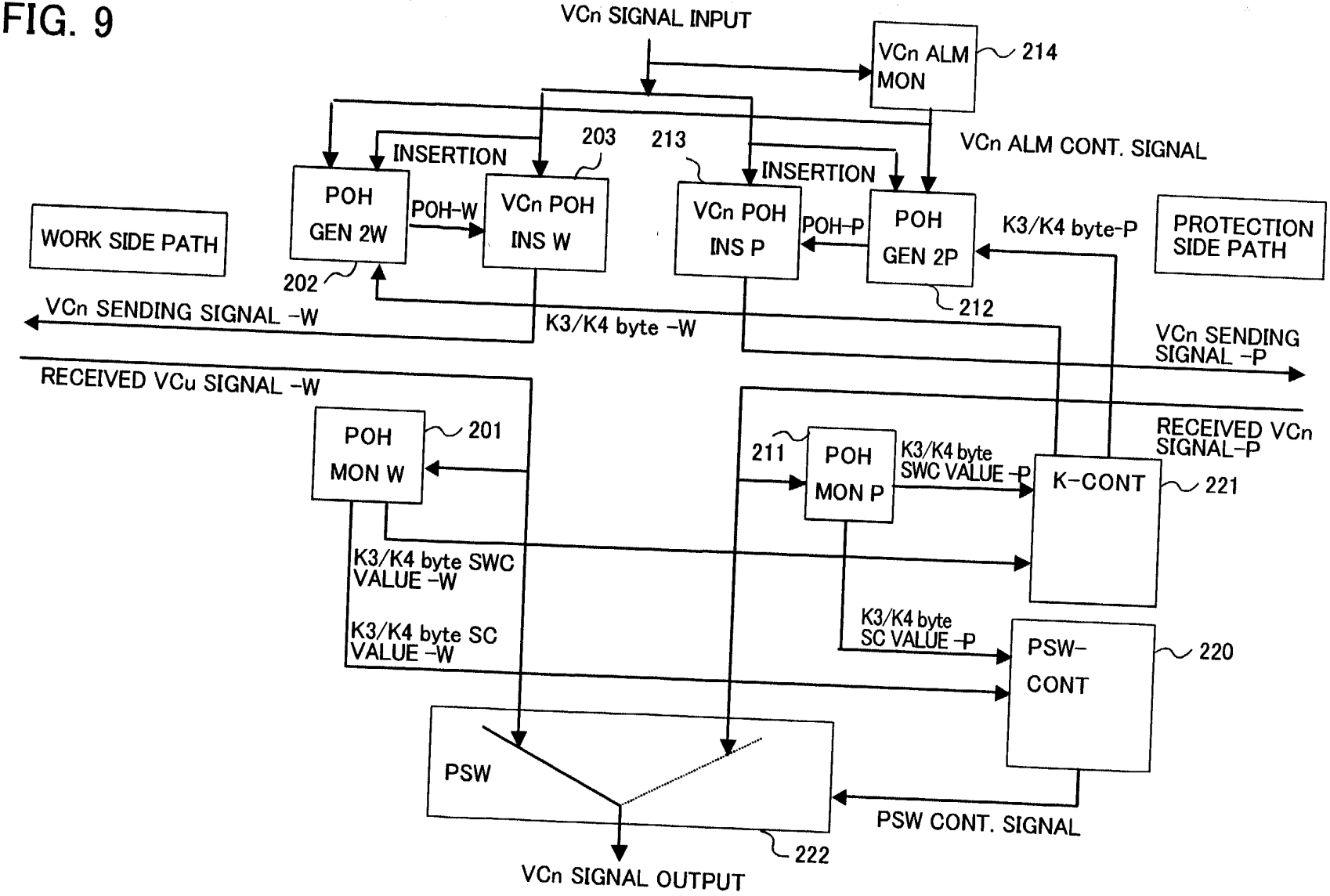

VCn SIGNAL INPUT
VCn ALM MON
214
VCn ALM CONT. SIGNAL
INSERTION
203
213
INSERTION
POH GEN 2W
POH-W
VCn POH INS W
VCn POH INS P
POH-P
POH GEN 2P
K3/K4 byte-P
WORK SIDE PATH
PROTECTION SIDE PATH
202
212
VCn SENDING SIGNAL -W
K3/K4 byte -W
VCn SENDING SIGNAL -P
RECEIVED VCu SIGNAL -W
RECEIVED VCn SIGNAL-P
POH MON W
201
211
POH MON P
K3/K4 byte SWC VALUE -P
K-CONT
221
K3/K4 byte SWC VALUE -W
K3/K4 byte SC VALUE -W
K3/K4 byte SC VALUE -P
PSW-CONT
220
PSW
PSW CONT. SIGNAL
222
VCn SIGNAL OUTPUT

FIG. 10

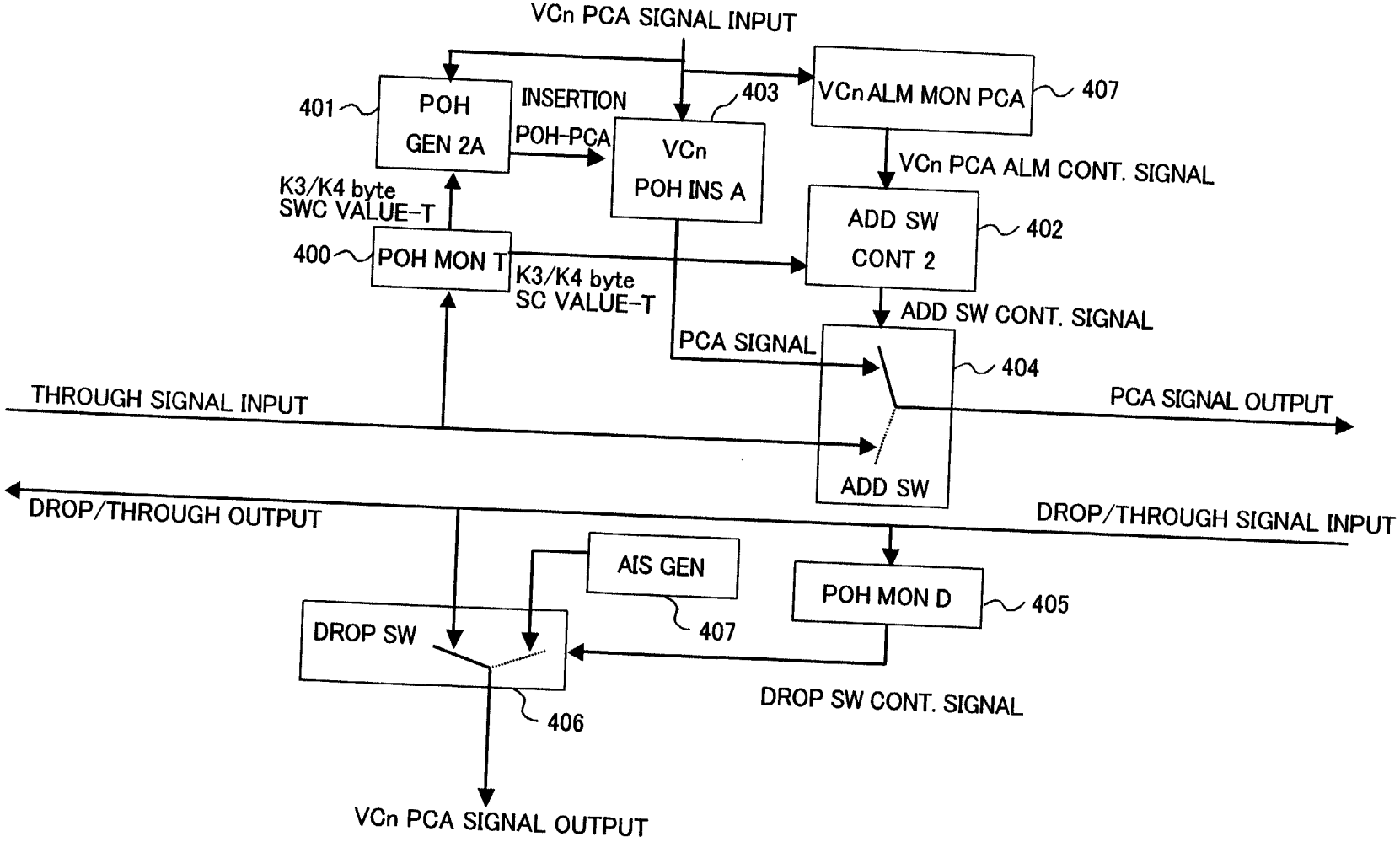

VCn PCA SIGNAL INPUT
401
POH
GEN 2A
INSERTION
POH-PCA
403
VCn
POH INS A
VCn ALM MON PCA
407
VCn PCA ALM CONT. SIGNAL
K3/K4 byte
SWC VALUE-T
400
POH MON T
K3/K4 byte
SC VALUE-T
ADD SW
CONT 2
402
ADD SW CONT. SIGNAL
PCA SIGNAL
404
THROUGH SIGNAL INPUT
PCA SIGNAL OUTPUT
ADD SW
DROP/THROUGH OUTPUT
DROP/THROUGH SIGNAL INPUT
AIS GEN
407
POH MON D
405
DROP SW
406
DROP SW CONT. SIGNAL
VCn PCA SIGNAL OUTPUT

FIG. 11

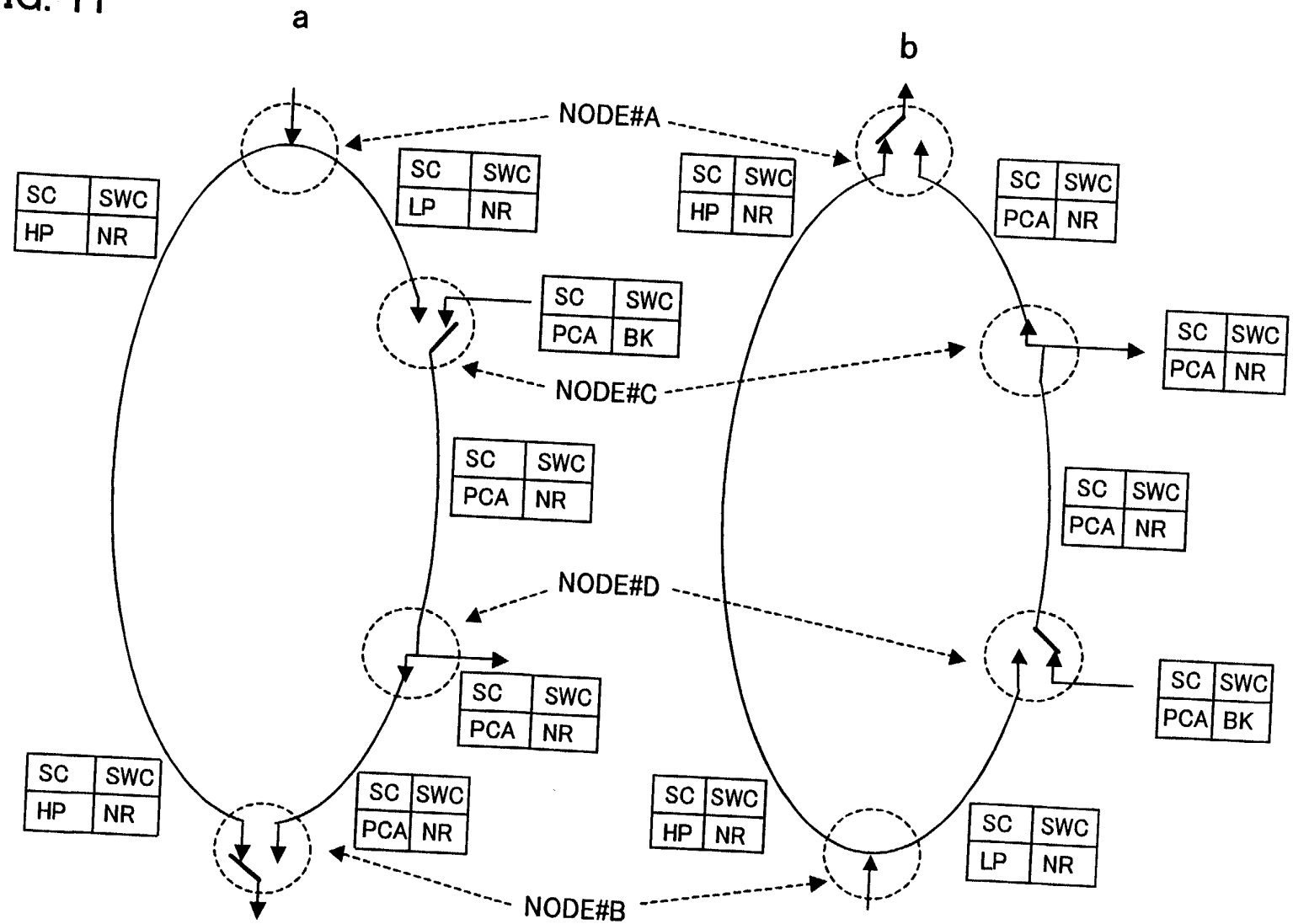

a
b
NODE#A
NODE#C
NODE#D
NODE#B
SC SWC HP NR
SC SWC LP NR
SC SWC PCA BK
SC SWC PCA NR

FIG. 12

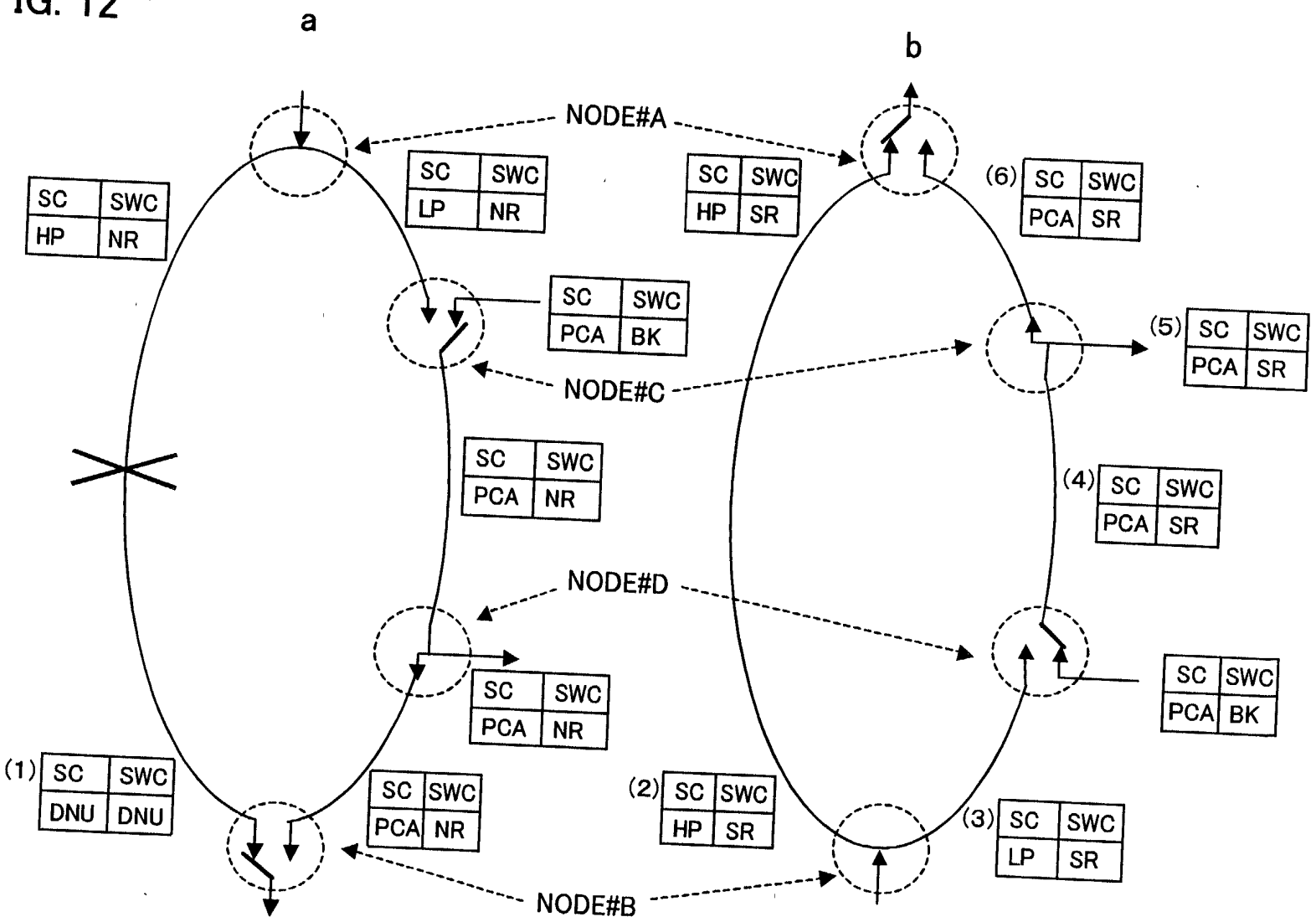

a
b
NODE#A
NODE#C
NODE#D
NODE#B
SC SWC HP NR
SC SWC LP NR
SC SWC HP SR
(6) SC SWC PCA SR
SC SWC PCA BK
(5) SC SWC PCA SR
SC SWC PCA NR
(4) SC SWC PCA SR
SC SWC PCA NR
SC SWC PCA BK
(1) SC SWC DNU DNU
SC SWC PCA NR
(2) SC SWC HP SR
(3) SC SWC LP SR

FIG. 13

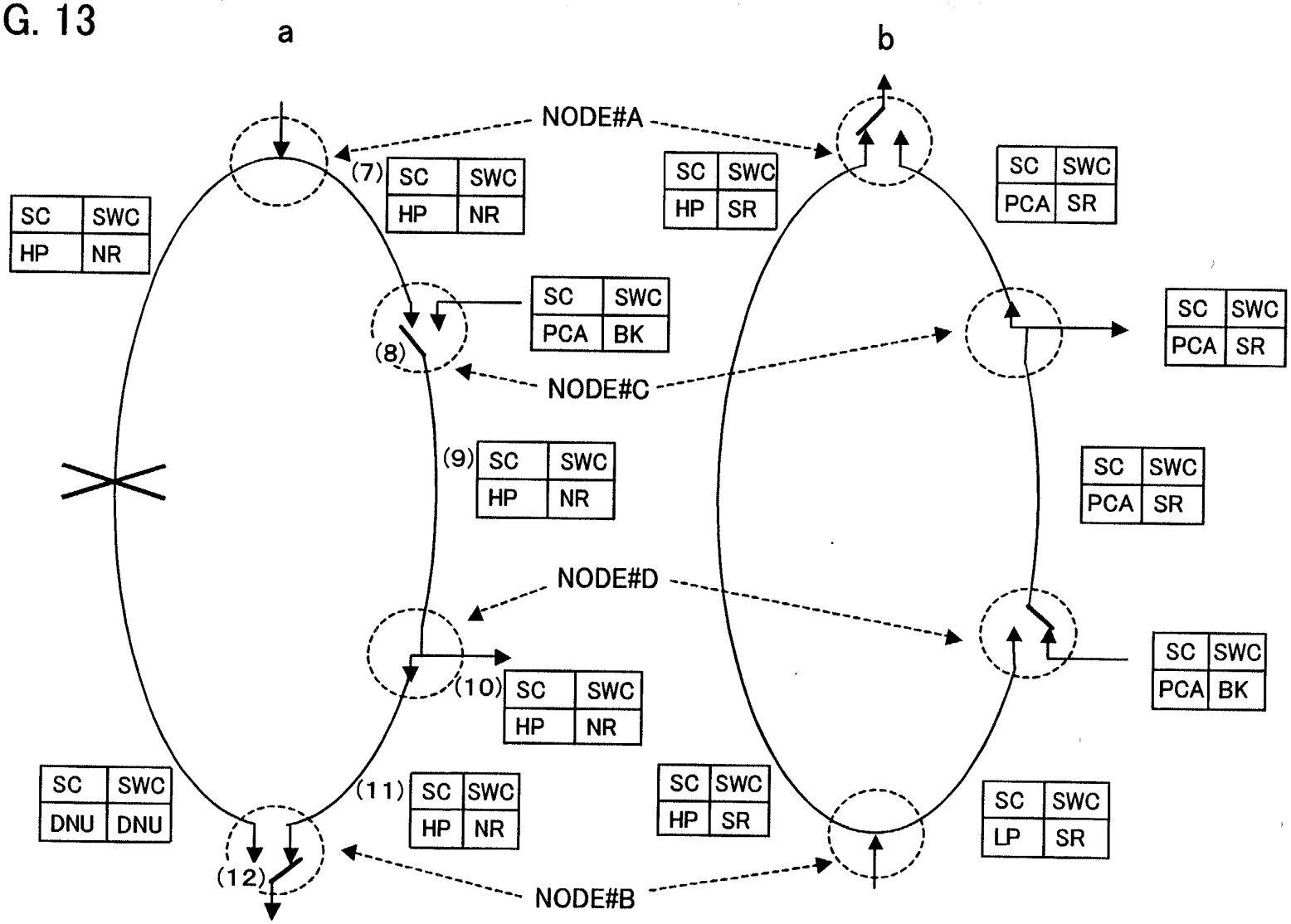

a
b
NODE#A
NODE#C
NODE#D
NODE#B
(7)
(8)
(9)
(10)
(11)
(12)
SC SWC
HP NR
SC SWC
HP SR
SC SWC
PCA SR
SC SWC
PCA BK
SC SWC
DNU DNU
SC SWC
LP SR

FIG. 14

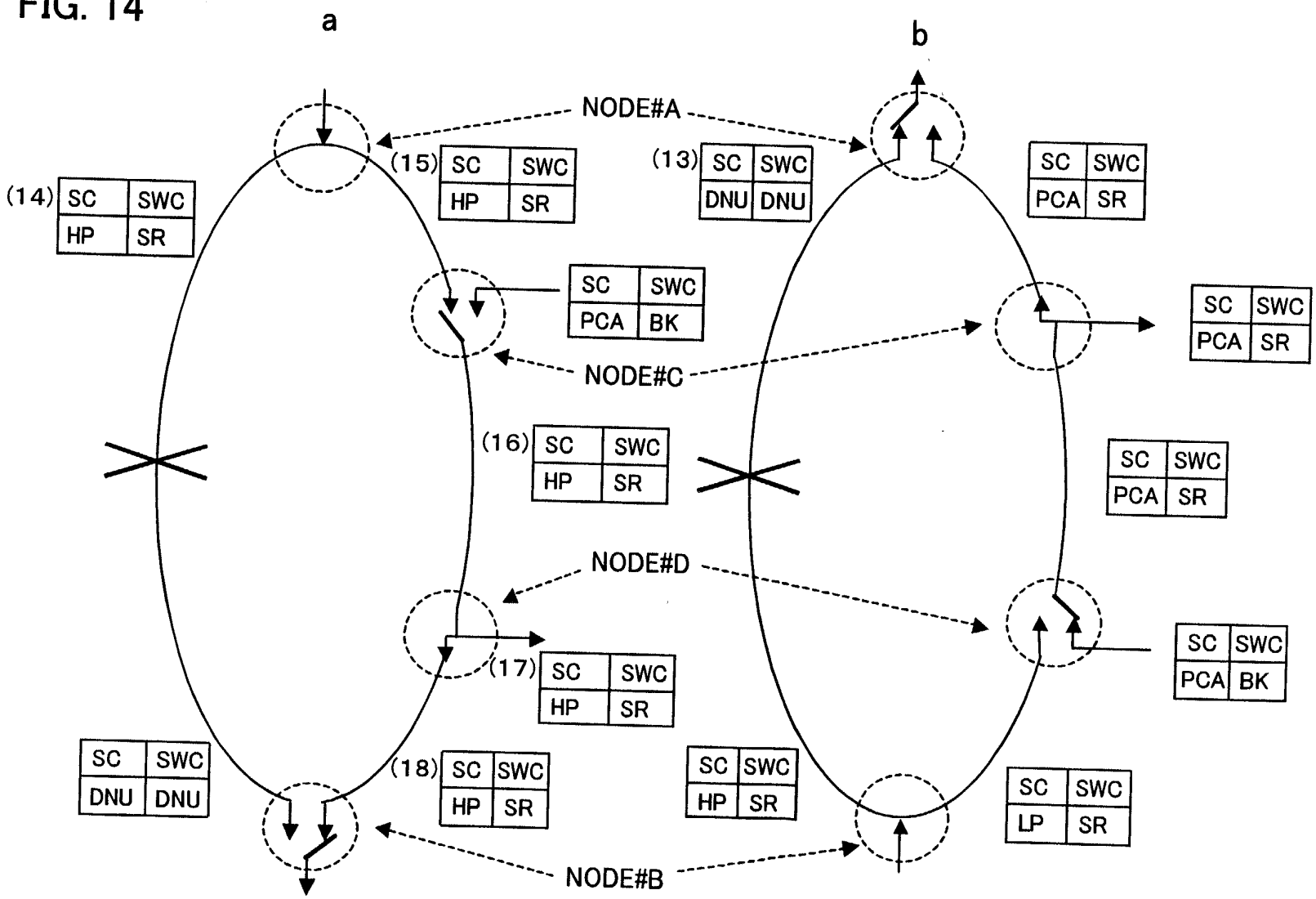

a
b
NODE#A
(15) SC SWC HP SR
(13) SC SWC DNU DNU
(14) SC SWC HP SR
SC SWC PCA SR
SC SWC PCA BK
NODE#C
SC SWC PCA SR
(16) SC SWC HP SR
SC SWC PCA SR
NODE#D
(17) SC SWC HP SR
SC SWC PCA BK
SC SWC DNU DNU
(18) SC SWC HP SR
SC SWC HP SR
SC SWC LP SR
NODE#B

FIG. 15

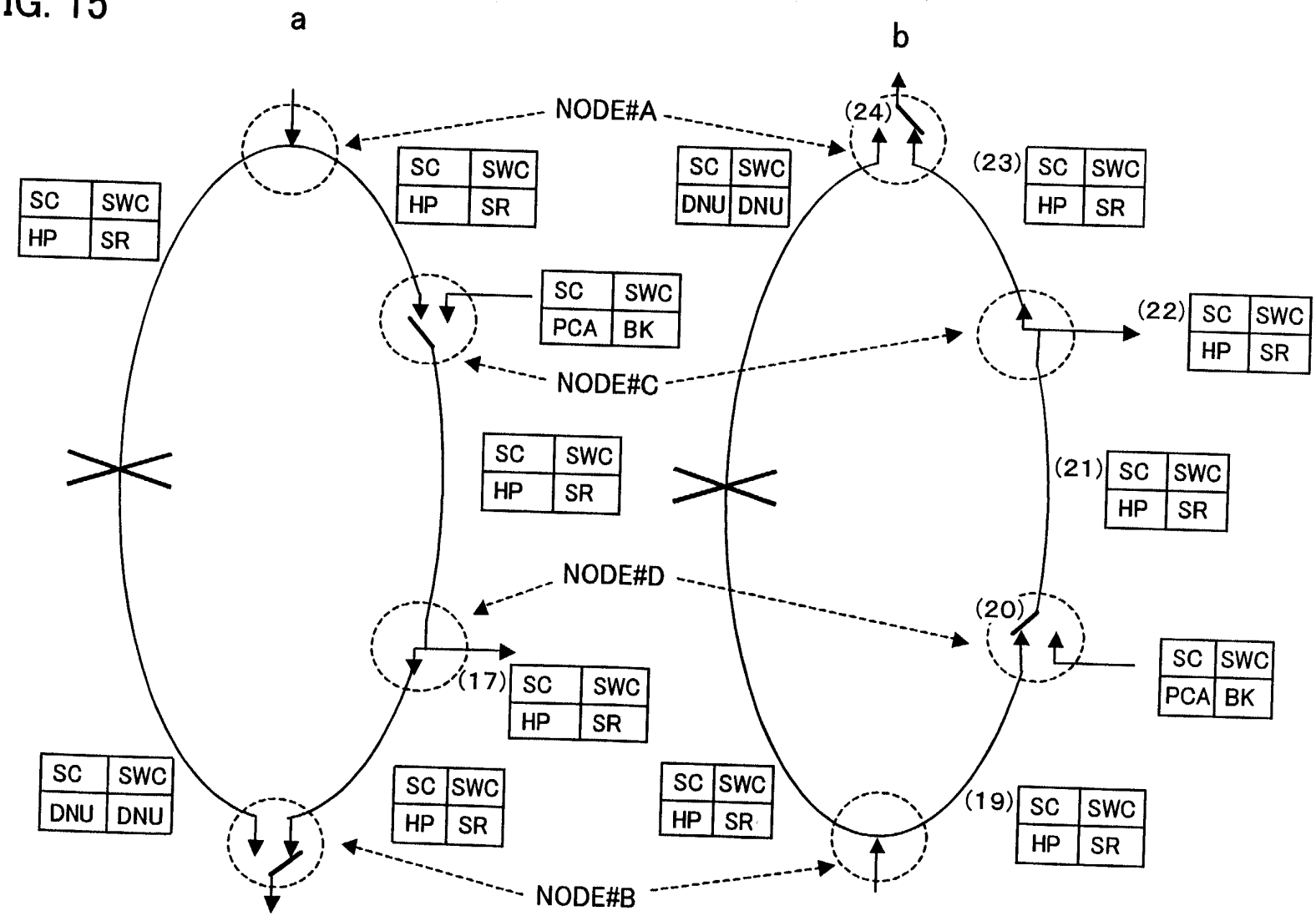

a
b
NODE#A
NODE#C
NODE#D
NODE#B
(24)
(23)
(22)
(21)
(20)
(19)
(17)
SC SWC
HP SR
SC SWC
DNU DNU
SC SWC
PCA BK

FIG. 16

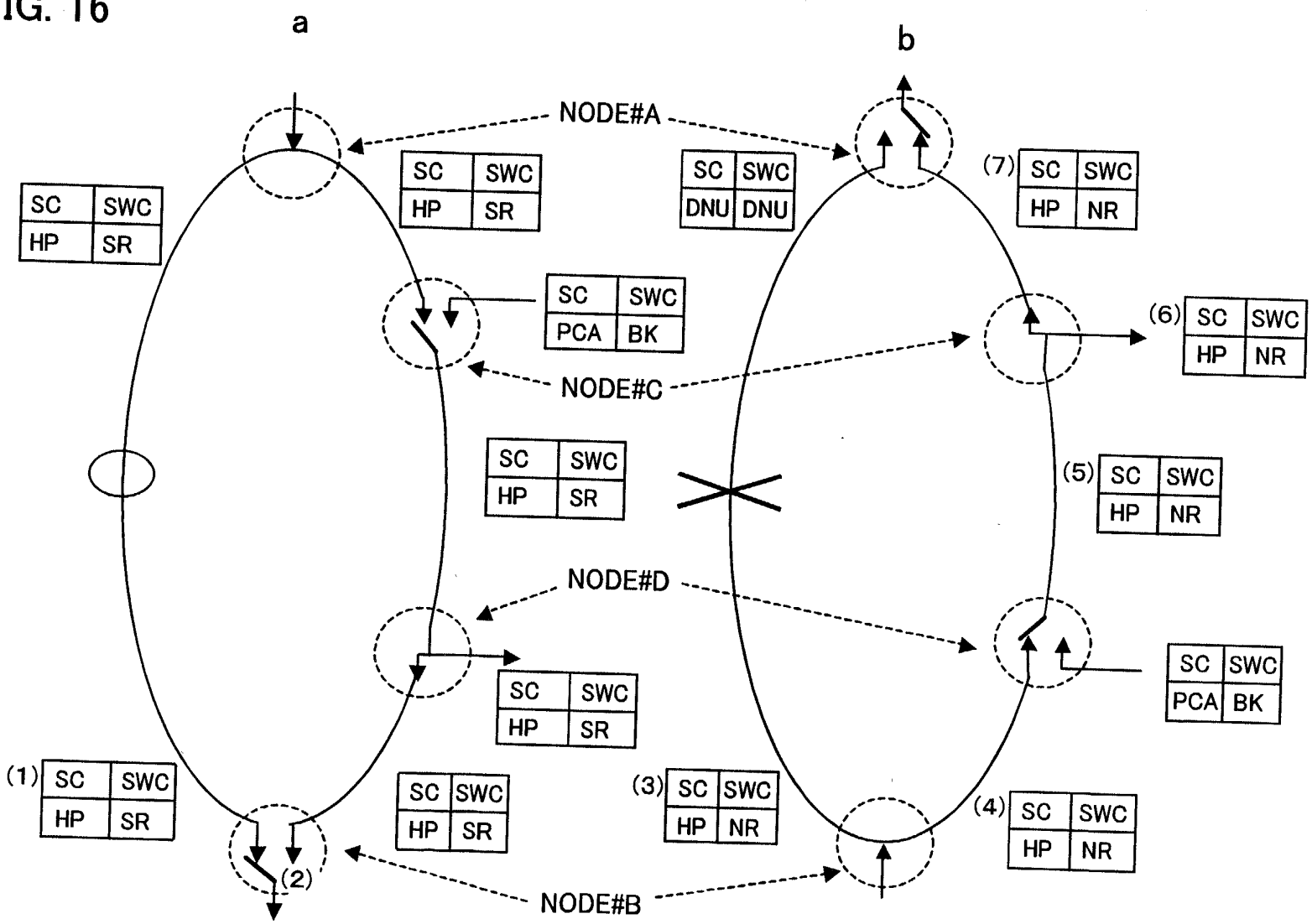

a
b
NODE#A
NODE#C
NODE#D
NODE#B
SC SWC HP SR
SC SWC DNU DNU
SC SWC PCA BK
(1) SC SWC HP SR
(2)
(3) SC SWC HP NR
(4) SC SWC HP NR
(5) SC SWC HP NR
(6) SC SWC HP NR
(7) SC SWC HP NR

FIG. 17

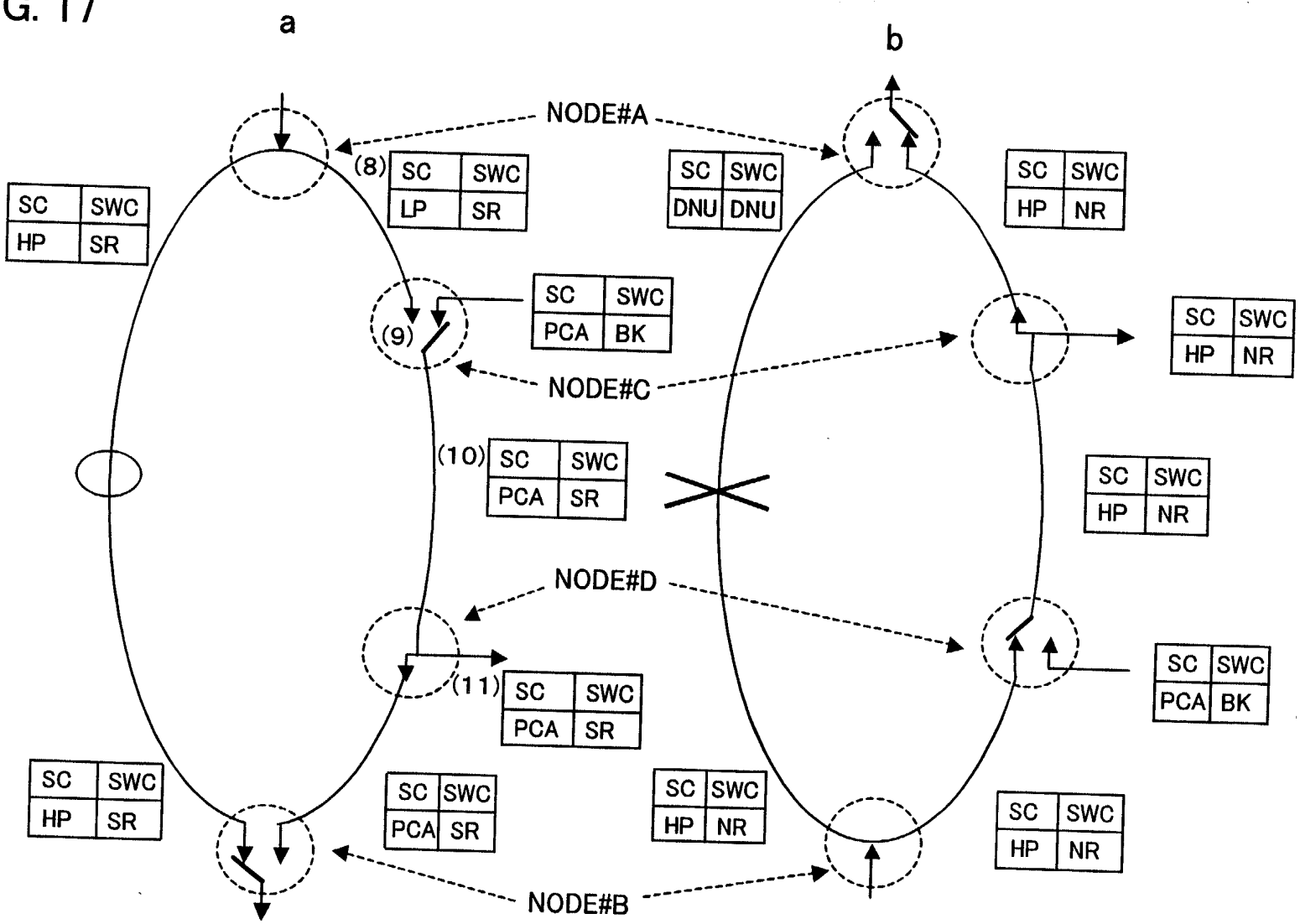

a
b
NODE#A
(8)
SC SWC
LP SR
SC SWC
DNU DNU
SC SWC
HP NR
SC SWC
HP SR
SC SWC
PCA BK
(9)
NODE#C
SC SWC
HP NR
(10)
SC SWC
PCA SR
SC SWC
HP NR
NODE#D
(11)
SC SWC
PCA SR
SC SWC
PCA BK
SC SWC
HP SR
SC SWC
PCA SR
SC SWC
HP NR
SC SWC
HP NR
NODE#B

FIG. 18

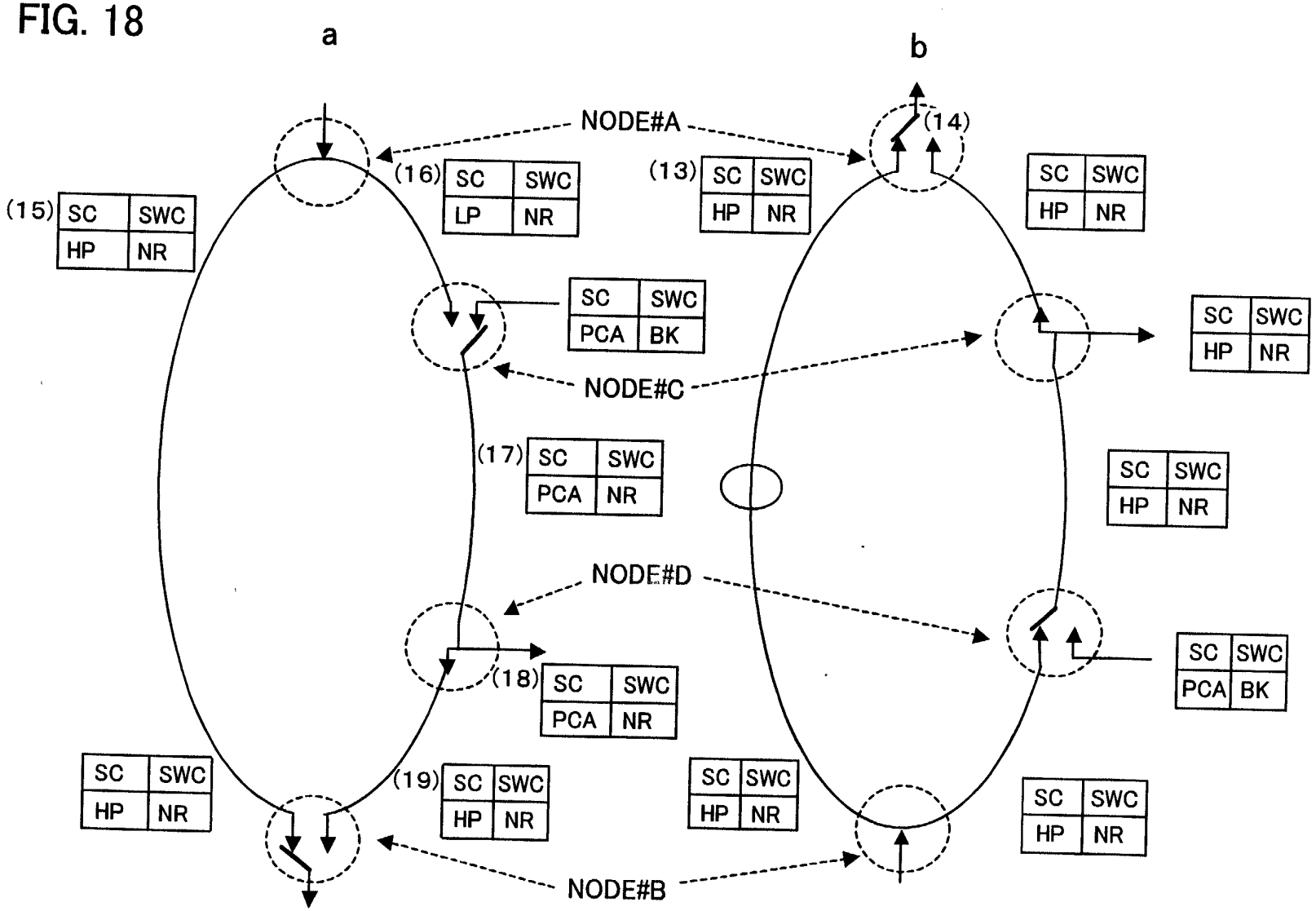
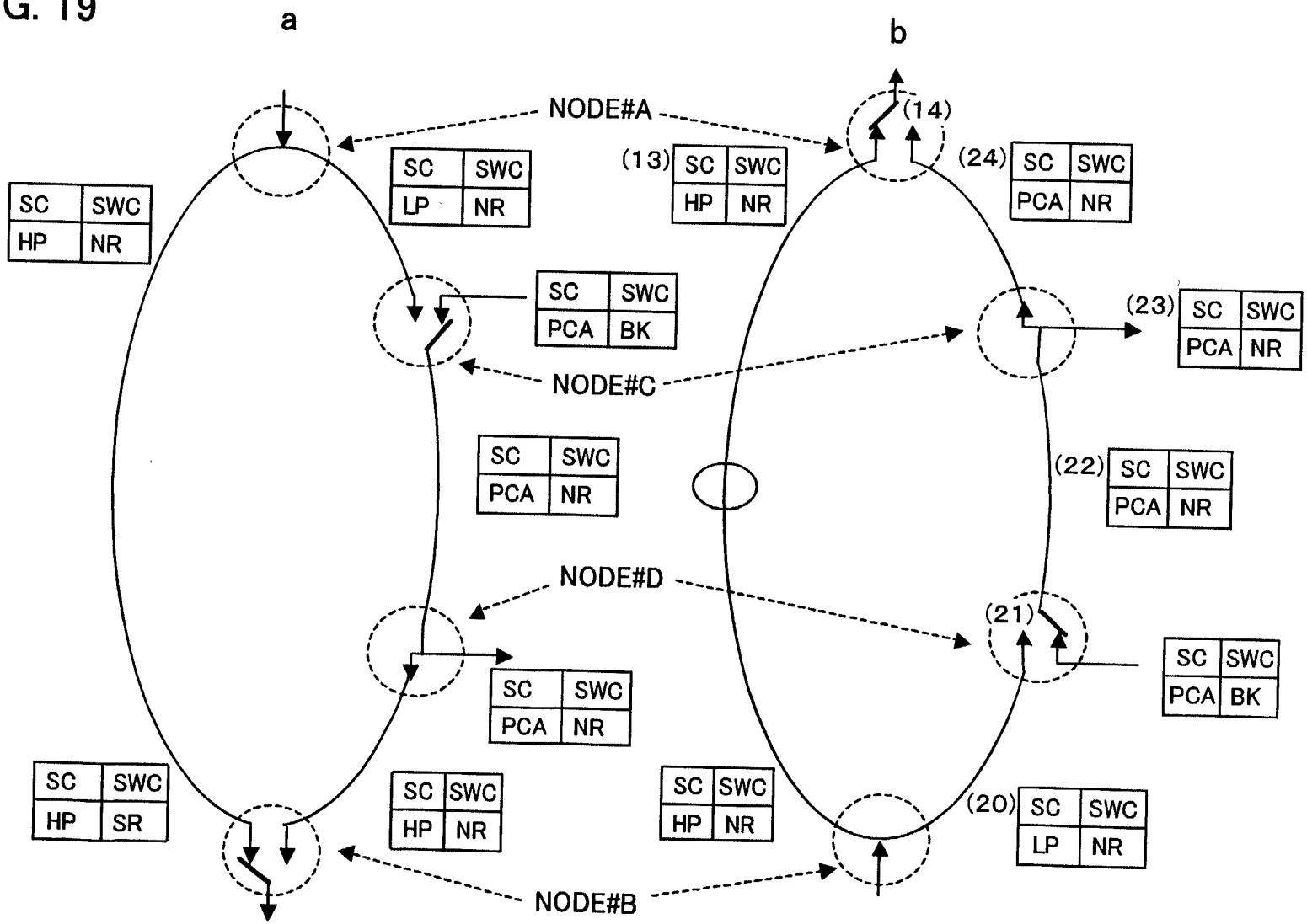

a
b
NODE#A
NODE#C
NODE#D
NODE#B
(13)
(14)
(15)
(16)
(17)
(18)
(19)
SC
SWC
HP
NR
LP
PCA
BK

FIG. 19


a
b
NODE#A
NODE#C
NODE#D
NODE#B
SC SWC HP NR
SC SWC LP NR
SC SWC PCA BK
SC SWC PCA NR
SC SWC HP SR
(13) SC SWC HP NR
(14)
(24) SC SWC PCA NR
(23) SC SWC PCA NR
(22) SC SWC PCA NR
(21) SC SWC PCA BK
(20) SC SWC LP NR